

**2004 National Hurricane Conference (NHC)**  
**OFCM Training Session on Information Dissemination Technology (IDT)**

1. **Purpose:** This document summarizes the IDT Training Session at the 2004 NHC, hosted by Mr. Samuel P. Williamson, Federal Coordinator for Meteorology. The IDT Training Session was held on April 6, 2004, in Lake Buena Vista, Florida.

2. **Background:** For the past 4 years, the Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) has sponsored a training session at the NHC. These sessions focus on a topic of interest to the Federal, state, and local agencies represented, as well as attendees from academia, print and television news media, and stakeholder communities. These stakeholders include emergency volunteers, amateur radio operators, and representatives from utilities, insurance companies, the building industry; and other private sector interests.

This year's training session was titled "*Information Dissemination Technologies and Architecture: Meeting the Growing Needs of Decision-Makers and the Public for Critical Weather Information.*"

3. **Objectives of the Training Session:**

- Examine the current and future policy and available information dissemination technologies and architecture for use in the dissemination of environmental (weather and climate) information to the emergency management community and the public.
- Acquire feedback from attendees on how the emergency management community (especially decision-makers and first responders) views current and planned resources; identify any unmet needs of the emergency management/responder community.

4. **Training Session Panels:** Approximately 100 conference attendees participated in the two panel discussions of the training session.

- **Panel I** examined current and future policy and available IDT and architecture for disseminating environmental (weather and climate) information to the emergency management community and the public. The panelists were:
  - Mr. Richard S. Eligan, Jr., Deputy Director, Office of National Security Coordination, Federal Emergency Management Administration, Department of Homeland Security
  - Mr. Herbert White, National Weather Service, Dissemination Services Manager
  - Mr. Kenneth B. Allen, Executive Director, Partnership for Public Warning
  - Mr. James Wright, American Association of State Highway and Transportation Officials, 511 Program Manager
- **Panel II** discussed ways to raise awareness of decision-makers and emergency responders regarding new, improved, or emerging tools and technology to disseminate critical all-hazards information to the public, especially information on hurricanes and inland flooding. The panelists were:
  - Dr. Steve Lyons, The Weather Channel
  - Mr. Robert D. Bunge, National Weather Service, Office of the Chief Information Officer
  - Chief Terry Tullier, Director, New Orleans Office of Emergency Preparedness

## 5. Summary:

- The Emergency Alert System (EAS) provides a national-level contingency telecommunications system for the President to speak to the American people. No national test has been performed, only local testing is currently exercised. DHS is pursuing plans for a nationwide test.
- Several Federal agencies (DHS, DOT/FHWA, DOC/NOAA/NWS) are pursuing digital services (PDAs, cell phones, pagers, etc.) for communicating weather warnings to stakeholders, while enhancing their legacy systems (NOAAPORT, NAWAS, EAS, NWWS, etc.).
- *Partnership for Public Warnings* (emergency management community—local and state governments, private sector, nonprofit community, and Federal agencies) is pursuing improved communication of warnings and alerts.
  - Public warning is a system, not a technology.
  - State of US public warning capability:
    - Fragmented and lacking consistent scales, standard terminology, strategy/vision, clear policies/procedures, and leadership
    - Dependent on TV and radio
    - Fails to warn those with special needs
    - Voluntary, lacks funding, and has little public recognition
  - When an emergency occurs, many individuals fail to get timely information, fail to understand or act on the information, and don't know where to go for additional information.
  - **Bottom line:** Existing systems fail to reach many people at risk and reach many people not at risk.
- **Weather information** tops the list of national 511 content and services desired by travelers— ahead of information on traffic incidents, road construction, travel times, etc.
  - The vision for 511. By 2005, have 511 operating in 25+ states, in 30 of top 60 major metro areas, and covering more than 50% of the Nation's population areas. Have 25% of US population aware of 511 and 90% of 511 users satisfied with its services.
- Changes in private sector weather communications media are driven by competition and/or getting a competitive edge; public service is a marketing tool.
  - Simple graphics are best; a large percentage of the population does **not** know how to interpret radar and satellite imagery.
  - Overall trend in media will be to emphasize rapidly changing weather events and focus on nowcasts and 3–6 hour forecasts.
  - The Weather Channel's area-specific broadcasts allow local emergency managers to insert and control their own "crawler" text messages.
- NOAA/NWS disseminates 80 different weather products—most are text-based and disseminated over multiple systems; e.g., NOAAPORT, NWWS, NWR, EAS, and the Internet (websites, FTP, etc.).
  - Architecture goals: (1) provide robust dissemination infrastructure that does not depend on any single source or technology, and (2) provide several access methods—not only for backup but also for different operational and customer needs.
  - Experiment with a variety of new technologies: (1) Extensible Markup Language (XML), which is designed to aid machine-to-machine data processing, (2) wireless formats, (3) DHS Disaster Management Interoperability Services (DMIS), and (4)

- GIS internet mapping services.
- Feedback on test with TPC/NHC and select WFO products has been positive for both XML and wireless formats.
- More alert products will be available in wireless formats in the near future.
- Socioeconomic factors and politics play major role in emergency management actions/decisions. New technologies need to complement, not replace, TV and radio, which are still widely used by the public.
  - When a decision to evacuate must be made, the biggest factor/consideration is accuracy of the 72-hour forecast.
  - The 5-day forecast is a good product for getting the public's attention.

**6. Next Steps:**

- Compile and interpret questionnaire responses gathered from the NHC attendees. (See Attachment)
- Collect data on gaps in user needs for IDT coverage.